

Serial No. 10/786,694
Harris
Case No. CE09312R

Amendments to the Claims:

1. (Currently Amended) A method for use with a wireless mobile station that is adapted and configured to interact with a wireless communication system using at least a first, second, and third mode of operation, wherein the first mode of operation comprises an active mode of operation where the mobile station actively uses an allocated communications channel, the third mode of operation comprises a dormant mode of operation where the mobile station is without an allocated communications channel, and the second mode of operation comprises a semi-dormant mode of operation where the mobile station maintains at least a portion of the allocated channel, comprising:

- monitoring at least one indicator of relative mobility regarding the rate of movement of the wireless mobile station within the wireless communication system to provide a mobility indicia;
- using the mobility indicia to adjust an inactivity temporal window during at least one of the modes of operation wherein the inactivity temporal window determines a duration the wireless mobile station remains in the at least one of the modes of operation.

2. (Original) The method of claim 1 wherein monitoring at least one indicator of relative mobility regarding the wireless mobile station further comprises monitoring a hand-off rate as corresponds to the wireless mobile station.

3. (Original) The method of claim 1 wherein monitoring at least one indicator of relative mobility regarding the wireless mobile station further comprises accessing at least one metric that corresponds to radio frequency measurement report messages.

4. (Original) The method of claim 3 wherein accessing at least one metric that corresponds to radio frequency measurement report messages further comprises accessing a metric that corresponds to a rate at which the wireless mobile station transmits radio frequency measurement report messages.

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5. (Original) The method of claim 1 and further comprising:
- determining an operating capability of the wireless mobile station;
 - modifying the inactivity temporal window as a function, at least in part, of the operating capability of the wireless mobile station.
6. (Original) The method of claim 2 wherein monitoring a hand-off rate as corresponds to the wireless mobile station further comprises monitoring a hand-off rate for at least a predetermined amount of time as corresponds to the wireless mobile station.
7. (Original) The method of claim 1 wherein monitoring at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia further comprises monitoring at an infrastructure element of the wireless communication system at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia.
8. (Original) The method of claim 1 wherein monitoring at an infrastructure element of the wireless communication system at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia further comprises monitoring at a radio access network (RAN) at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia.
9. (Original) The method of claim 1 wherein monitoring at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia further comprises monitoring at the wireless mobile station at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia.
10. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises using the mobility indicia to increase a duration of an inactivity temporal window during a mode of operation.

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11. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises using the mobility indicia to decrease a duration of an inactivity temporal window during a mode of operation.

12. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises using the mobility indicia to adjust an inactivity temporal window during the first mode of operation to thereby dynamically control a duration of inactivity prior to automatically causing the wireless mobile station to cease using the first mode of operation and to begin using the second mode of operation.

13. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises, when the mobility indicia corresponds to at least some predetermined amount of increased mobility, using the mobility indicia to increase an inactivity temporal window for use during the first mode of operation.

14. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises using the mobility indicia to adjust an inactivity temporal window during the second mode of operation to thereby dynamically control a duration of inactivity prior to automatically causing the wireless mobile station to cease using the second mode of operation and to begin using a different mode of operation.

15. (Original) The method of claim 1 and further comprising:

- monitoring wireless communication system setup times to provide a setup time indicia;
- using the setup time indicia to further adjust the inactivity temporal window during the mode of operation.

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16. (Original) The method of claim 15 wherein monitoring wireless communication system setup times to provide a setup time indicia further comprises monitoring wireless communication system setup times for a plurality of wireless communication units to provide a setup time indicia.

17. (Original) The method of claim 15 wherein using the setup time indicia to further adjust the inactivity temporal window during the mode of operation further comprises increasing the inactivity temporal window in response to a setup time indicia that reflects a setup time delay that has increased by at least more than a predetermined amount.

18. (Original) The method of claim 15 wherein using the setup time indicia to further adjust the inactivity temporal window during the mode of operation further comprises decreasing the inactivity temporal window in response to a setup time indicia that reflects a setup time delay that has decreased by at least more than a predetermined amount.

19. (Original) The method of claim 1 wherein using the mobility indicia to adjust an inactivity temporal window during a mode of operation further comprises using the mobility indicia to adjust an inactivity temporal window for use during at least two different modes of operation.

20. (Currently Amended) An apparatus comprising:

- a first memory having mobility indicia information as pertains to at least a first wireless mobile station stored therein wherein the mobility indicia information pertains to the rate of movement of the first wireless mobile station within a wireless communication system;
- a second memory having information corresponding to an inactivity timer as pertains to the first wireless mobile station stored therein;
- a processing platform that is operably coupled to the first and second memory and having instructions stored therein to modify operation of the inactivity timer as a function, at least in part, of the mobility indicia information wherein the inactivity

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timer determines a duration the first wireless mobile station remains in at least one of a plurality of modes of operation.

21. (Original) The apparatus of claim 20 wherein the apparatus comprises an infrastructure element of a wireless communication system.

22. (Original) The apparatus of claim 21 wherein the infrastructure element comprises a radio access network (RAN).

23. (Original) The apparatus of claim 20 wherein the apparatus comprises a wireless mobile station.

24. (Original) The apparatus of claim 20 wherein the apparatus comprises a combination of an infrastructure element of a wireless communication system and a wireless mobile station.

25. (Original) The apparatus of claim 20 and further comprising:

- a third memory having communication resources setup delay information stored therein;
- and
- wherein the processing platform further operably couples to the third memory; and
- the instructions further modify the operation of the inactivity timer as a function, at least in part, of the setup delay information.

26. (Original) The apparatus of claim 20 wherein the processing platform further comprises processing means for automatically adjusting the inactivity timer in response to the mobility indicia information.

27. (Currently Amended) A method for use with a wireless mobile station that is adapted and configured to interact with a wireless communication system using at least a first, second, and third mode of operation, wherein the first mode of operation comprises an active mode of operation where the mobile station actively uses an allocated

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communications channel, the third mode of operation comprises a dormant mode of operation where the mobile station is without allocated communications channel, and the second mode of operation comprises a semi-dormant mode of operation where the mobile station maintains at least a portion of the allocated channel, comprising:

- monitoring at least one indicator of communication resources setup delay information as corresponds to the wireless communication system to provide a setup delay indicia;
- using the setup delay indicia to adjust an inactivity temporal window as corresponds to the wireless mobile station during a mode of operation wherein the inactivity temporal window determines a duration the wireless mobile station remains in one of the first, second and third mode of operation.

28. (Original) The method of claim 27 wherein monitoring at least one indicator of communication resources setup delay information as corresponds to the wireless communication system further comprises monitoring at least one indicator of communication resources setup delay information as corresponds to the wireless communication system for a plurality of wireless mobile stations.

29. (Original) The method of claim 27 and further comprising:

- monitoring at least one indicator of relative mobility regarding the wireless mobile station to provide a mobility indicia;
- using the mobility indicia to further adjust the inactivity temporal window during the mode of operation.